

### **REMARKS**

Claims 1-15 and 17-20 are currently pending in the application. The Office has rejected claims 1-15 and 20, and their respective dependent claims, under § 112, first paragraph. The Office has rejected claims 1-10 and 20 under § 103(a) as allegedly being unpatentable over Gray et al. (“Gray”) in view of USP No. 6,324,647 to Bowman-Amuah (“Bowman-Amuah”) in further view of O’Reilly. The Office has rejected claims 11-15 under § 103(a) as allegedly being unpatentable over Gray in view of O’Reilly. The Office has rejected claims 17-19 under § 103(a) as allegedly being unpatentable over Gray in view of Bowman-Amuah.

The Applicants respectfully traverse the rejection and request continued examination in view of the amendments indicated above and the remarks below.

#### **Claim Amendments**

Claims 17-19 have been canceled, without disclaimer or prejudice. Claims 21 and 22 have been added. Other claim amendments are indicated as below.

#### **Claim Rejections under § 112**

The Office has rejected claims 1-15 and 20 under § 112, second paragraph, for allegedly failing to comply with the written description requirement. The Applicants respectfully disagree with the Office, and have provided several citations in the specification that support the limitation. In the interests of furthering prosecution, without disclaimer or prejudice, claims 1, 11 and 20 have been amended by removing the recitation of “defined by a user input”. The Applicants respectfully assert that the rejection under § 112 has been traversed and request that the Office reconsider and withdraw the rejection to claims 1-15 and 20.

**Claim Rejections under § 103(a)**

The Office has rejected claims 1-10 and 20 under § 103(a) as allegedly being unpatentable over Gray et al. (“Gray”) in view of USP No. 6,324,647 to Bowman-Amuah (“Bowman-Amuah”) in further view of O’Reilly. The Office has rejected claims 11-15 under § 103(a) as allegedly being unpatentable over Gray in view of O’Reilly. The Office has rejected claims 17-19 under § 103(a) as allegedly being unpatentable over Gray in view of Bowman-Amuah.

*Independent claim 1*

The Applicants have amended claim 1 in the following manner:

*wherein the seed is within a range allowed by at least one parameter of the data generation module, wherein the at least one parameter is configured to cause the data generation module to generate the synthetic data, wherein the synthetic data is repeatable.*

The Office has relied upon the disclosure of Gray to allegedly teach certain recitations of claim 1. The Applicants assert that Gray fails as a reference under § 103(a) because Gray explicitly teaches away from the claimed subject matter.

The Office acknowledged that Gray fails to at least disclose synthetic data that is repeatable. “...Gray does not explicitly disclose that the data generated is identical for each time the data is generated (repeatable)....” (Office Action). But, the disclosure of Gray is not silent as to what data is generated, i.e. repeatable or not repeatable, but in fact, explicitly discloses data which is randomly generated, which teaches away from the claimed subject matter.

Specifically, the section relied upon by the Office is entitled, “Generating Dense Unique Random Data”. The section continues by disclosing the parameters of the problem Gray is attempting to solve, including the parameter of “Random: The sequence appears to be “random” (pseudo-random).” (Gray, pg. 246, first column). Further, the program relied upon by the Office, program 6, as disclosed by Gray generates random, i.e. non-repeatable, data. “In essence, a random number generator is constructed for elements in the desired range.” (Gray, pg. 246, second column). This may be seen by two inputs to program 6 of Gray, namely, a first column

containing a dense sequence then a second column containing a random sequence. (Gray, pg. 246, first column). By using random data to populate a sequence, the resulting sequence is random. (Gray, pg. 246, second column).

The Office argues that Program 8 discloses the recitation of claim 1, wherein each of the collections comprise contents and a sequence, and wherein the contents of each of the collections are identical and the sequence of each of the collections are identical...” (Office action). The Office appears to be arguing that program 8 will yield, in two implementations of program 8, data that is random within each implementation but the same from implementation to implementation. The Office states that, “...each time the series [of program 8] is generated using the same numbers for the formula, the same (random) series will be generated.” But Gray fails to disclose that proposition. As explicitly discussed by Gray, the purpose of the use of program 8 is to generate random numbers that are not the same. The benchmark used by Gray is how random the numbers that are generated are. “In [Knuth’s] terminology, all the random number generators in this paper pass the spectral test ‘with flying colors’ in dimensions 2 through 6.” (Gray, pg. 246, col. 2). The spectral test of Knuth is a test that measures the randomness of a series of numbers. Thus, program 8 of Gray passes “with flying colors” because the numbers are random. If the numbers were not random, i.e. repeatable as recited in claim 1, program 8 of Gray would not “pass with flying colors”. Additionally, Gray is silent as to the use of the seed in equation 7 which is implemented in program 8.

In a different manner, claim 1 of the present application recites, “wherein *the seed is within a range allowed by at least one parameter of the data generation module*, wherein the at least one parameter is configured to cause the data generation module to generate the synthetic data, *wherein the synthetic data is repeatable*.” Claim 1, as amended, recites a data determination module configured to produce repeatable, synthetic data. Further, claim 1 recites that the “seed is within a range...to generate the synthetic data”. Gray fails to disclose any range of seed “G”. Thus, Gray fails to teach the recitations relied upon by the Office and teaches away from the claimed subject matter, Gray fails as a reference under § 103(a).

Gray, in combination with Bowman-Amuah and O'Reilly fails to disclose all recitations of claim 1, and thus, fail to render claim 1 obvious. The Applications respectfully request reconsideration and withdraw of the rejection to claim 1.

*Dependent claim 4*

The Office rejected claim 4, alleging that Gray in view of Bowman-Amuah discloses the recitation of, "...wherein the seed is set for each discrete element that may be re-generated." Gray discloses, in program 6, a seed that is started at "G", a number termed, "generator". As discussed above, the disclosed functionality of Gray is to generate dense, unique random numbers. The random input of Gray, as best understood, would prevent the ability to set a seed to re-generate a discrete element, as the randomness of the input data renders the output of the function containing the seed random. Therefore, because Gray or Bowman-Amuah fails to disclose the recitation of claim 4, and for reason of its dependence upon an allowable independent claim, claim 4 is allowable. The Applications respectfully request reconsideration and withdraw of the rejection to claim 4.

*Independent claims 11 and 20*

For the reasons discussed above in relation to claim 1 and the amendments indicated above, the combination of Gray with Bowman-Amuah and O'Reilly fails to render claims 11 and 20 obvious. Additionally, claim 20 has been amended to including the recitation of, "...wherein the seed is set for each discrete element that may be re-generated." Therefore, the Applicants respectfully assert that the rejections to claims 11 and 20 have been traversed and request that the Examiner reconsider and withdraw the rejections to claims 11 and 20.

*Dependent claims 2-10, and 12-15*

By reason of the dependence upon an allowable base claim, it follows that claims 2-10 and 12-15 are also allowable. The Applicants respectfully request that the Office reconsider and withdraw the rejections to claims 2-10 and 12-15.

*Newly Added Claims 21 and 22*

Independent claim 21 has been added. The Applicants respectfully assert that claim 21 is allowable for the reasons discussed above and for the following reasons. In the references cited, the Office fails to indicate how the seed value may be determined. In claim 21, the seed value is used to position the random number generator to a particular point in the sequence. Thus, as claimed in claim 21, the value at a particular position is known. Instead of calculating the entire sequence to retrieve the value at a particular position, because the values at a particular position are determined, the method of claim 21 can be used to determine a single value at a particular position by inputting a particular value of a seed, which is determined from the random number generator.

The Applicants assert that the references cited do not disclose the recitations of claim 21, including, without limitation, the determination of a seed value which can be used to determine a particular value of a position of the random sequence generator. Gray fails to disclose the determination of a value of a seed prior to input into the random number generator.

**DOCKET NO.:** MSFT-1797/303687.1  
**Application No.:** 10/610,690  
**Office Action Dated:** January 14, 2008

**PATENT**

### **CONCLUSION**

By the amendments and remarks provided herein, the Applicants respectfully submit that the Office Action mailed January 14, 2008 has been traversed and that the application is in condition for allowance. If the Examiner has any concerns regarding the response provided herein, or wishes to discuss the response further, the Examiner is invited to contact the undersigned attorney.

The deadline for filing the response within the 5-month shortened statutory period fell on Saturday, June 14, 2008. Thus, the present response is timely filed within the 5-month shortened statutory period as being filed on the following, non-holiday Monday, June 16, 2008.

Respectfully submitted,

Date: June 16, 2008

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